III. REMARKS ON THE AMENDMENTS

Remarks on the Amendment to the Specification

As stated above, the requested amendment mirrors that previously made on pages 5 and 6 of Applicants' response dated December 19, 2005 but wherein the requested paragraphs were incorrectly identified. Entry of the amendments at page 19, lines 10-26 and page 24, lines 22-31 is requested. Moreover, it is requested that the prior incorrect second set of instructions at pages 5 and 6 of Applicants' response of December 19, 2005 be disregarded.

It is believed that no new matter is added by entry of this amendment.

Remarks on the Amendment to the Claims:

The characterization of claim 18 has been corrected. In the amendment filed on December 19, 2005, claim 18 was characterized as "Currently Amended" but no amendment was presented. Upon review, it seems that Claim 18, as presently presented, is Original and has been so characterized.

Claims 20, 33 and 46 are amended to address the concern articulated by the Examiner in paragraph IV of the Office Action.

Claim 71 has been amended to include salt forms of the compound. Antecedent basis for this amendment can be found throughout the specification but in particular at page 50, lines 3-11. The claim has also been amended as suggested by the Examiner at page 5 of the Office Action and as discussed during the personal interview on May 25, 2006.

New claims 73-74 are added to more distinctly claim the subject matter for which Applicants seek a patent. Antecedent basis for these claims can be found throughout the specification but in particular at page 45, line 22 to page 47, line 12.

It is believed that no new matter is added by entry of this amendment.

IV. FORMAL MATTERS

1. Interview

The Examiner (Nyeemah Grazier) and her supervisor (Dr. Kamal Saeed) are thanked for the curtsey extended to Applicants' representative during the interview on May 25, 2006. Comments contained in this submission are intended to be additive to those set forth in the Interview Summary prepared by Examiner Riley on May 25, 2006. (See: 37 C.F.R. § 1.133)

2. Status of Certain Claims

At paragraph I (page 2) of the Office Action, there is a remark suggesting that claim 71 is withdrawn because it does not relate to a compound. Respectfully, claim 71 is drawn to a compound. Moreover, the remainder of the Office Action suggests that claim 71 is pending, including the Office Action Summary. The pendency of claim 71 was confirmed during the personal interview on May 25, 2006. The Examiner is requested to confirm this fact in the next communication from the Office.

According to the Office Action Summary, no claims appear to be allowed. However, according to page 7 of the Office Action, it appears that claims 28, 29, 31-32 and 34-40 are allowed. Clarification is requested. That claims 28, 29, 31-32 and 34-40 are allowed was confirmed during the personal interview on May 25, 2006. The Examiner is requested to confirm this fact in the next communication from the Office.

3. New Information Disclosure Statement

At paragraph II (page 2) of the present Office Action, the Examiner notes that no dates are entered for references HF and HG. Said references are resubmitted with an IDS accompanying this response wherein the dates of publication are identified in PTO-1449. Additionally, an English translation of EP 209763A1 and JP 01125357 (both cited by the Examiner at page 6 of the present Office Action) is submitted. One or more additional references may also be presented. Review of these documents and return of the executed PTO-1449 with the next Office communication is respectfully requested. Authorization to deduct the appropriate fee for consideration of these references can be found in the papers that accompany this response.

4. Restriction Requirement

It is acknowledged that the restriction requirement was deemed proper and made FINAL according to pages 2-3 of the Office Action. Although Applicants disagree that restriction is proper (at least for the reasons argued in Applicants' response dated December 19, 2005), it is believed that amendments previously entered render moot substantially all of the issues raised by the original restriction requirement. Accordingly, Applicants reserve the right to petition for reconsideration (under 37 C.F.R. § 1.144) of the restriction requirement. Nevertheless, because it seems that Applicants' prior amendments have rendered moot the controversy, Applicants will await a Final Action before deciding whether or not to file said petition.

5. Other Co-Pending Applications Owned by Applera Corporation

For the convenience of the Examiner, reference is made to the following copending applications owned by Applera Corporation. The Examiner is invited to review the claims of these applications for consideration of any other obviousness type double patenting rejections that he/she may feel is appropriate.

Title	Serial No.	Filing Date
Active Esters of N-Substituted Piperazine Acetic Acids,	10/751,354	05 Jan 2004
Including Isotopically Enriched Versions Thereof		
Isotopically Enriched N-Substituted Piperazine Acetic Acids	10/751,387	05 Jan 2004
And Methods For The Preparation Thereof		
Isotopically Enriched N-Substituted Piperazines And	10/751,388	05 Jan 2004
Methods For The Preparation Thereof		
Methods And Mixtures Pertaining To Analyte	10/765,264	27 Jan 2004
Determination Using Electrophilic Labeling Reagents		
Compositions And Kits Pertaining To Analyte	10/765,267	27 Jan 2004
Determination		
Methods And Mixtures Pertaining To Analyte	10/765,458	27 Jan 2004
Determination		
Mixtures Of Isobarically Labeled Analytes And Fragments	10/822,639	12 Apr 2004
Ions Derived Therefrom		
Isobarically Labeled Analytes And Fragment Ions Derived	10/852,730	24 May 2004
Therefrom		
Method And Apparatus For De-Convoluting A Convoluted	10/916,629	12 Aug 2004
Spectrum		
Analysis Of Mass Spectral Data In The Quiet Zones	10/999,638	24 Nov 2004

Preparation Of Biologically Derived Fluids For Biomarker	11/051,807	04 Feb 2005
Determination By Mass Spectrometry		
Determination of Analyte Characteristics Based Upon	11/069,277	01 Mar 2005
Affinity Binding Properties		
Isobaric-Coded Mass Tags for Quantitative Protein Analyses	11/179,060	11 Jul 2005
with Tandem MS		
Methods, Compositions and Kits Pertaining To Analyte	11/319,685	28 Dec 2005
Determination		
Isobaric-Coded Mass Tags for Quantiative Protein Analysis	11/355,904	15 Feb 2006
with Tandem MS		

V. RESPONSE TO THE OFFICE ACTION REJECTIONS

1. Rejection for Obviousness-Type Double Patenting

As previously discussed, since both patent applications remain pending, claims of one or both applications can be amended and/or canceled. Accordingly, this provisional rejection should be held in abeyance until such time as both patent applications contain allowable subject matter or in the alternative until this application is determined to have otherwise allowable subject matter that conflicts with pending claims of the other patent application. At such time, Applicants can reconsider the requirement for a terminal disclaimer or cancel the offending claims.

Notwithstanding the foregoing, Applicants disagree with the Examiner's statement that: "new claim 71, which is drawn to a morpholine and not a piperazine." (OA at page 4) It is believed that new claim 71 is drawn to morpholine and piperazine compounds and now, as amended as discussed during the personal interview on May 25, 2006, also pertains to piperidine compounds. New claims 73-74 are added to bring clarity to this issue.

2. New Rejections under 35 U.S.C. § 112, Second Paragraph

a) The Law Of 35 U.S.C. § 112, Second Paragraph

Claims are not analyzed in a vacuum. *In re Moore*, 58 C.C.P.A. 1042, 1047, 439 F.2d 1232, 1235, 169 U.S.P.Q. 236, 238 (Cust.&Pat.App., 1971). In footnote 2, the court stated: "It is important here to understand that under this analysis claims which on first reading -- in a vacuum, if you will-- appear indefinite may upon reading of the specification disclosure or prior art teachings become quite definite." *Id.*, 169 U.S.P.Q. at 240. Thus, it is well settled that a claim is sufficiently definite for purposes of the second paragraph of 35 USC § 112 if one

of ordinary skill in the art would understand what is claimed when considered in light of the specification and the prior art. *Penda Corporation v. United States*, 29 Fed.Cl. 533, 554 (1993). "A phrase is not indefinite merely because the specification does not define it" Id. The second paragraph of 35 USC §112 requires only reasonable precision in delineating the bounds of the claimed invention. *United States v. Telectronics, Inc.*, 857 F.2d 778, 786, 8 U.S.P.Q.2d 1217, 1223 (Fed. Cir. 1988).

b) Discussion

At page 5, claim 71 is rejected under 35 U.S.C. §112, second paragraph as being incomplete. At the end of the paragraph, the Examiner suggests that CJ_2 might possibly have been intended to be stated as $C(J)_2$. It is respectfully submitted that in the context of the specification, it is clear to the ordinary practitioner that the variable J attached to the "carbon of the heterocyclic ring" can properly be stated as CJ_2 just as CH_2 would be proper if J were hydrogen (and indeed this is one possibility). Regardless, Applicants agree with the Examiner's suggestion that $C(J)_2$ can be used for clarity and have amended the claim accordingly. However, it is respectfully submitted that while said amendment clarifies the claim language, it does not reduced its scope.

At page 5, claims 3 and 4 are rejected for reciting the limitation "one or more substituents". Based upon the amendment to claim 71, it is believed that the claim is sufficiently clear that the limitation "one or more substituents" refers to the whether or not each J is hydrogen or a substituent (e.g. an alkyl, an alkoxy or an aryl group – see claim 4). Moreover, the variable W, is clearly intended to be an ortho, meta or para group that is substituted for a carbon of the heterocyclic ring such that the heterocycle can be, for example, a morpholine or piperazine as repeatedly discussed in the specification and shown in various structures illustrated in the specification and figures. Regardless, claim 71 has been amended so that the group W is in the para position only as discussed during the personal interview on May 25, 2006. In brief, it is believed that claims 3 and 4 are sufficiently clear as presently claimed when viewed in light of the specification (See for example, page 28, line 14 to page 32, line 3) and the present amendment to claim 71.

At page 5, claim 10 is rejected for reciting the limitation "wherein the compound is a salt". Based upon the amendment to claim 71, it is believed that this rejection is rendered moot.

At page 5, claim 8 is rejected for reciting the limitation "wherein the six membered heterocyclic ring comprises one or more nitrogen, oxygen or sulfur atom." It is respectfully submitted that since W is NH, N-R¹, N-R², P-R¹, P-R², O, C or S, it is clear that the heterocyclic ring can comprise one or more nitrogen, oxygen or sulfur atoms. Contrary to statement at page 5 suggesting that claim 71 is drawn to a piperidine ring¹, it is believed that claim 71 is drawn to morpholine and piperazine compounds, and now also piperidine compounds as it has been amended.

At page 6, claim 11 is rejected for reciting the limitation: "wherein the compound is a mono-TFA salt, a mono-HCl salt, a bis-TFA salt or a bis-HCl salt." Based upon the amendment to claim 71, it is believed that this rejection is rendered moot.

At page 6, claims 20, 33 and 46 are rejected for reciting the limitation: "methoxy". It is believed that the amendments to claims 20, 33 and 46 render this rejection moot.

Reconsideration of all claims, as amended, and withdrawal of each rejection under 35 U.S.C. § 112, second paragraph is requested.

3. Rejections under 35 U.S.C. § 102

(a) Statement Of The Law Of 35 U.S.C. § 102(b)

It is well settled that to be anticipated, a prior art reference must teach each and every element/limitation of the claimed subject matter. M.P.E.P. § 2131. Moreover, the elements must be arranged as required by the claim. *Id.* "The identical invention must be shown in as complete detail as is contained in the claim" *Id.* quoting from *Richardson v. Suzuki Motor Co.*, 868 F2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

(b) Banasiak et al. Does Not Satisfy The Test

In the present Office Action, claims 15 and 20 are rejected under 35 U.S.C.§ 102(b) as being anticipated by Banasiak et al. (EP 209763). Applicants traverse the rejection.

¹ The assertion on page 5 of the Office Action that claim 71 is drawn to only piperidine compounds seems to conflict with the statement on page 4 that: "new claim 71, which is drawn to a morpholine and not a piperazine."

Included with this response is an English translation of EP 209730. It is respectfully submitted that Banasiak et al. does not teach all of the elements of the claimed subject matter arranged as required by the claim. In particular, it seems apparent that Banasiak et al. does not teach, at least, the element of an "*N-substituted morpholine acetic acid active ester [that] is isotopically enriched with one or more heavy atom isotopes.*" (See claim 15) Accordingly, there can be no anticipation. Reconsideration and withdrawal of the rejection of claims 15 and 20 under 35 U.S.C. § 102(b) is respectfully requested.

(c) Sawayama et al. Does Not Satisfy The Test

In the present Office Action, claims 41, 44 and 46 are rejected under 35 U.S.C.§ 102(b) as being anticipated by Sawayama et al. (JP 01125357). Applicants traverse the rejection.

Included with this response is an English translation of JP 01125357. It is respectfully submitted that Sawayama et al. does not teach all of the elements of the claimed subject matter arranged as required by the claim. In particular, it seems apparent that Sawayama et al. does not teach, at least, the element of an "N-substituted piperazine acetic acid active ester [that] is isotopically enriched with one or more heavy atom isotopes." (See claim 41) Accordingly, there can be no anticipation. Reconsideration and withdrawal of the rejection of claims 41, 44 and 46 under 35 U.S.C. § 102(b) is respectfully requested.

4. Reconsideration of method claims under In re Ochiai

As stated above, it is believed that composition claims 2-5, 8-16, 18-29, 31-42, 44-53 and 71 are allowable over the art cited in the present Office Action. Since these are composition claims, reconsideration of the related, but currently withdrawn, method claim 72 is hereby requested under the reasoning of *In re Ochiai*, 71 F.3d 1565; 37 U.S.P.Q.2d 1127 (Fed Cir. 1995).

V. SUMMARY

It is believed that this response addresses all rejections set forth in the present Office Action and the application is in ready condition for allowance. In consideration of the preceding amendments and remarks, Applicants hereby respectfully request reconsideration of all pending claims, the withdrawal of all rejections set forth in the present Office Action and issue of a Notice of Allowance by The Office.

VI. INTERVIEW

If the Examiner believes a telephonic or personal interview would advance the prosecution of the subject application, the Examiner is invited to contact attorney Gildea during business hours at the telephone or facsimile numbers listed below.

VIII. FEES

A new IDS and authorization to deduct the appropriate fee from Deposit Account 01-2213 for consideration of said IDS is being submitted herewith. Because the amendment set forth herein does not increase the claim count beyond that on which the original filing fee was paid (5 independent and 70 total claims), it is believed that there is no requirement for the payment of any additional fee. Because this response is being filed within the shorted statutory period for response, again it is believed that no fee is required for consideration of this response by the Office. If however, The Office determines that any fee is properly due for its consideration of this paper, authorization is hereby granted to charge any required fee associated with the filing or proper consideration of this paper to Deposit Account 01-2213 (Invoice No. BP0207-US3).

IX. CORRESPONDENCE/CUSTOMER NUMBER

Please send all correspondence pertaining to this document to:

Brian D. Gildea, Esq. **Applied Biosystems** 500 Old Connecticut Path Framingham, MA 01701 Telephone:

508-383-7632

Fax:

508-383-7468

Email:

brian.gildea@appliedbiosystems.com

IF NOT ALREADY DONE, PLEASE ASSOCIATE THIS CASE WITH CUSTOMER NUMBER

June 8, 2006 Date 23544

Respectfully submitted on behalf of Applicants,

Bio. Su

Brian D. Gildea, Esq.; Reg. No. 39,995